

Comparisons of Job Characteristics

Focus Occupation: Network Systems and Data Communications Analysts (15-1081)

Associated Occupation: Computer Hardware Engineers (17-2061)

Compare Knowledge

Compare Skills

Compare Abilities

Compare Detailed Work Activities

Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Network Systems and Data Communications Analysts (15-1081)

Associated Occupation: Computer Hardware Engineers (17-2061)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Computers and Electronics	8.4	22.7	21.2	0	Current knowledge level may be sufficient
Engineering and Technology	5.7	17.2	10.4	<<	Extensive education and/or training may be required
Design	5.2	11.7	7.8	<<	Extensive education and/or training may be required
Telecommunications	3.9	11.6	17.4	>>	Current knowledge level is likely more than sufficient
Communications and Media	5.3	10.2	7.9	<	Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 69

Focus Occupation: Network Systems and Data Communications Analysts (15-1081)

Associated Occupation: Computer Hardware Engineers (17-2061)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Complex Problem Solving	9.1	12.6	11.1	<	A higher skill level may be required
Active Learning	8.7	12.0	12.0	0	Current skill level may be sufficient
Operations Analysis	5.0	10.5	11.5	0	Current skill level may be sufficient
Science	4.5	9.8	7.3	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	9.8	11.5	>	Skill level is likely sufficient
Troubleshooting	4.5	8.3	10.3	>	Skill level is likely sufficient
Programming	2.2	6.1	9.6	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 92			
Focus Occupation: Network Systems and Data Communications Analysts (15-1081) Associated Occupation: Computer Hardware Engineers (17-2061)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Comprehension	12.5	15.3	12.7	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	14.5	12.3	<	Some improvement in abilities may be required
Written Comprehension	11.0	14.2	10.6	<<	Extensive improvement in abilities may be required
Inductive Reasoning	10.2	13.6	10.7	<<	Extensive improvement in abilities may be required
Problem Sensitivity	11.1	13.6	12.0	<	Some improvement in abilities may be required
Written Expression	9.8	12.8	9.9	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	11.4	11.6	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 78
Focus Occupation: Network Systems and Data Communications Analysts (15-1081) Associated Occupation: Computer Hardware Engineers (17-2061)		
Work Activities	Exclusivity of Activity	
Communicate technical information	4	
Evaluate computer system user requests or requirements	81	
Follow data security procedures	77	
Follow data storage procedures	75	
Prepare technical reports or related documentation	22	
Provide technical computer training	82	
Provide technical support to computer users	80	
Test computer programs or systems	78	
Use computer networking technology	81	
Use computers to enter, access or retrieve data	3	
Use knowledge of mainframe computers	78	
Use project management techniques	47	
Use spreadsheet software	18	
Use word processing or desktop publishing software	17	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 80

Focus Occupation: Network Systems and Data Communications Analysts (15-1081)
Associated Occupation: Computer Hardware Engineers (17-2061)

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Electrical measuring and testing equipment	7
Electronic and communication measuring and testing instruments	14
Industry specific software	1
Light and wave generating and measuring equipment	4
Network applications software	1
Operating environment software	12

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.